Eu Ai Act and Its Relationship with Vietnamese Law in Creating a Legal Policy for Ai Regulation

Le Thi Minh¹

Abstract

The EU AI Act sets out the ground rules for developing, marketing, and using AI products and services in EU countries, structuring a risk-based system to impose obligations on parties developing or using AI systems. Based on the latest draft of the AI Act adopted by the European Parliament in June 2023, this article provides an overview of the AI Act. At the same time, the article explores the impact of the AI Act on the legal framework of artificial intelligence in general. The article also explores the current status of the legal system in Vietnam related to AI. Thereby, the article proposes a framework of a recommendation nature in perfecting the legal framework regulating AI in Vietnam based on inspiration and experience from the EU AI Act.

Keywords: AI Act, European Union, Vietnamese Law, Artificial Intelligence, Intellectual Property Rights

INTRODUCTION

The legal landscape of AI has undergone rapid development in recent times. Most notably, the Proposed Regulation of the European Parliament and the Council set out harmonized rules on Artificial Intelligence (the AI Act), adopted by the European Parliament in June 2023, and is currently undergoing the following steps before it can officially enter into force (European Parliament, 2023). The AI Act is seen as the world’s first systematic regulation of AI (European Commission, 2021). This is the first comprehensive regulation to address the risks of artificial intelligence through a series of requirements to protect the health, safety, and fundamental rights of EU citizens, and is expected to impact AI governance worldwide (Edwards, 2022) significantly.

The EU AI Act aims to ensure that Europe becomes a trusted global hub for AI by setting out harmonized rules governing the development, marketing, and use of AI in the EU. AI systems in the EU must be used safely, respecting fundamental rights and values. Furthermore, the AI Act promotes investment and innovation in AI, strengthens governance and enforcement, and promotes a single EU market for AI. The AI Act also encourages innovation and competitiveness in the AI sector (European et al., 2015).

THE AI ACT’S LOCATION, HISTORY, AND EXPECTED FUTURE

The AI Act is part of the three pillars proposed by the European Commission to support AI in the EU. The remaining two pillars include the Product Liability Directive (PLD) and the AI Liability Directive (AILD). While the AI Act focuses on basic safety, protection, and preemptive prevention requirements, the PLD and AILD address harm caused by AI systems.

The AI Act is also part of a suite of rules governing different aspects of the digital economy. The rest of the set includes the EU’s General Data Protection Regulation (GDPR), the Digital Services Act (DSA), and the Digital Markets Act (DMA). Therefore, the AI Act does not address data protection, online platforms, or content moderation, as these are issues already discussed in the GDPR, DSA, and DMA.

The AI Act also does not contain any copyright provisions. However, copyright is indirectly regulated in the provisions on models used in synthetic AI systems. Providers must publicly disclose a full, detailed summary of the copyrighted material used in the input data, as stipulated in Article 28b(4)(c). This is the first provision in the world related to copyright issues for input data sources.

¹ Thu Dau Mot University, Orcid number: 0000-0003-0156-4046; E-mail: minhlt@tdmu.edu.vn
The AI Act is a landmark piece of legislation that will have significant implications for developing and using AI systems in the European Union, reflecting the EU’s ambition to become a global leader in trustworthy and ethical AI while promoting innovation and competitiveness in the AI sector. The history and anticipated future of the AI Act is outlined in the following table:

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 2021</td>
<td>The European Commission has presented a draft regulation setting out harmonized rules on artificial intelligence (the AI Act) to protect fundamental rights in the EU and the safety of users. The proposal is accompanied by a new coordination plan between the Commission and the 27 EU member states to enhance the use of AI.</td>
</tr>
<tr>
<td>December 2022</td>
<td>European Council adopts AI Act.</td>
</tr>
<tr>
<td>June 2023</td>
<td>European Parliament Passes AI Act</td>
</tr>
<tr>
<td>End of 2023</td>
<td>Reaching agreement on AI Act.</td>
</tr>
<tr>
<td>2024</td>
<td>Passing the AI Act in its final stages.</td>
</tr>
<tr>
<td>Late 2025 - Early 2026 (expected)</td>
<td>The AI Act will come into effect after a transition period of 18 to 24 months.</td>
</tr>
</tbody>
</table>

**PRINCIPAL REGULATIONS OF THE EU AI ACT**

**SUBJECTS AND SCOPE OF APPLICATION**

The AI Act builds on the existing European product liability legislation but is specifically designed for AI systems. In line with product liability legislation, it covers all participants in the AI value chain. These include, in particular, the following groups of actors: (i) Suppliers, developers of AI systems to place them on the market or put them into use under their name or brand (Article 3); (ii) Users, meaning any natural or legal person using an AI system under their control; (iii) Importers and distributors of AI systems (Articles 26–28), to prevent dangerous products manufactured outside the EU from entering the EU.

The EU AI Act is thus likely to apply to all parties involved in developing, deploying, and using AI. Therefore, it applies across a wide range of sectors and will also apply to industries outside the EU if the product is intended for use in the EU. The scope of the Act is vast, governing not only EU users of AI but also providers who place AI systems on the market or put them into use in the EU, as defined in Article 3(4).

In a nutshell, the AI Act provides a clear scope for various actors involved in AI, including suppliers, implementers, importers, distributors, and manufacturers of products. All parties developing, using, importing, distributing, or manufacturing AI models will be held accountable. Notably, the AI Act will even cover AI systems developed and used outside the EU if the output of those systems is intended for use in the EU. As a result, the extraterritorial reach of the Act is extensive. If suppliers and users outside the EU find that their system output is being used in the EU, such entities will fall within the scope and subject matter of the AI Act. This approach recognizes the borderless capabilities of AI.

There are, however, three exceptions to the AI Act, including (i) AI systems developed or used exclusively for military purposes and, potentially, broader national defense and security purposes, pending negotiation; and (ii) AI developed and used for scientific research; and (iii) Open-source and freely available AI components and systems.

**THE WORLD'S FIRST LEGAL DEFINITION OF AI**

AI has evolved from a computer science field to a legal science field. However, there was no official legal definition of "artificial intelligence" until the EU issued the Draft AI Act. The lack of a uniform definition of AI reduces the scope for legal regulation. However, defining AI is difficult due to the rapid development of technology. The definition of AI must be narrower to cover future AI systems. Conversely, if the definition is narrow enough, it will help technological innovation.

The AI Act provides a technology-neutral definition and establishes horizontally harmonized regulations applicable to AI systems. It is the first Act in the world to regulate AI comprehensively (Quach, 2023). Article
3(1) describes “an artificial intelligence system (AI system) means software developed with one or more of the
techniques and approaches listed in Annex I and which can, for a set of human-defined objectives, produce
outputs such as content, predictions, recommendations or decisions affecting the environment with which it
interacts.” This definition does not focus on what is produced (precisely the output of the AI) but rather on
how these outputs are produced.

Appendix I lists different software techniques and approaches, including (i) different types of machine learning
(supervised, unsupervised, and reinforcement) using various methods (e.g., deep learning), (ii) logic and
knowledge-based approaches, and (iii) statistical methods. The Appendix has tamed the volatile nature of AI
systems by classifying them into three broad categories as above (McCarthy, 1989). This definition is flexible
enough to accommodate technical advances and is therefore compatible with the rapidly evolving nature of AI
technology (European Commission, 2020). A small change in the Appendix can easily modify the proposed
systems.

This definition is similar to that of the Organization for Economic Cooperation and Development (OECD) in
a (non-binding) recommendation on AI in 2019 (OECD, 2019). According to this recommendation, an
"artificial intelligence system" is a machine-based system that can make predictions, recommendations, or
decisions affecting a real or virtual environment towards a set of human-defined objectives." The similarity of
the EU regulation with the OECD recommendation helps to strengthen legal certainty, harmonization, and
broad acceptability in the definition of AI (OECD, 2019).

**AI IS APPROACHED BASED ON RISK LEVEL.**

At the heart of the AI Act is a risk classification system, which regulates AI systems based on the level of risk
they pose to a person's health, safety, and fundamental rights. Four types of risk are addressed under the Act:
unacceptable risk (prohibited), high risk, limited risk, or no risk. Each level of risk is regulated accordingly.

First, prohibited AI systems, or unacceptable AI systems, are AI systems that are considered harmful to human
safety, livelihood, and rights, as defined in Article 5. Specifically, these are AI systems that (i) employ
manipulative or deceptive techniques, (ii) exploit human vulnerabilities, (iii) are intended to engage in social
scoring that leads to adverse action, and (iv) use real-time remote biometric identification systems in accessible
public spaces.

Second, high-risk AI systems are applications that pose a significant threat to human health, safety, fundamental
rights, and the environment, as defined in Section 3, Chapter III of the Act. These are AI systems that are used
as a safety component of a product or are themselves a product covered by EU health and safety law, as well
as systems that fall within the areas listed in Annex III of the AI Act.

While not prohibited, high-risk AI systems are subject to strict obligations in Articles 8 to 15 of the AI Act.
Companies that choose to build high-risk AI systems must meet defined criteria before they can be integrated
into the general market. Owners must design these AI systems with transparency, explainability, and ethics
embedded into the system's core. They must ensure monitoring, guardrails, and governance are in place to
ensure ongoing ethical compliance. These obligations apply consistently to suppliers, deployers, importers,
distributors, and users.

Third, limited-risk AI systems are listed in Title IV of the AI Act. Limited-risk AI systems pose some risk to
users, such as systems that generate or manipulate content or provide chatbot services. These systems must
meet transparency requirements, providing users with clear information about their nature and purpose and
allowing users to opt out of their use.

Fourth, minimal-risk AI systems pose no or negligible risks, such as systems used for entertainment or personal
purposes. Minimal-risk AI systems must adhere to voluntary codes of conduct and best practices.

**INFORMATION TRANSPARENCY RESPONSIBILITY**
Under Article 52 of the AI Act, providers of systems that interact with natural persons (such as chatbots) must comply with transparency obligations and, in particular, ensure that people who come into contact with such systems know they are interacting with an AI system.

Similarly, users of emotion recognition systems or biometric classification systems, although not prohibited by Article 5, must inform persons who come into contact with such systems about the operation of the systems and obtain their prior consent to processing their biometric and other personal data by applicable EU law.

Additionally, users of AI systems that create or manipulate text, audio, or visual content that could be mistaken for a human creator must disclose that an AI system created the content. For example, systems like ChatGPT must inform that the content was AI-generated, distinguish fake images from natural images, and provide safeguards against creating illegal content.

Developers are required to self-identify the risk profile of their AI systems. Similarly, developers may self-assess and self-certify the compliance of their AI systems and governance practices with the requirements described in the AI Act, subject to certain exceptions. Following developer certification of compliance, deployers must comply with monitoring and recordkeeping obligations as well as transparency and human oversight obligations after they put a high-risk AI system into use.

The above transparency obligations do not apply to AI systems authorized by law to detect, prevent, investigate, and prosecute crime.

**PENALTIES FOR NON-COMPLIANCE**

Entities engaging in prohibited AI activities could be fined up to €40 million ($43 million) or up to 7% of the company’s annual global turnover, whichever is higher. This is significantly higher than the EU’s typical data privacy regulations. Under the General Data Protection Regulation (GDPR), the maximum fine for a company violating the law is €10 million ($10.8 million) or 2% of a company's global turnover. The high fines under the AI Act serve as a stern reminder from the legislature to take the provisions of the AI Act seriously.

However, the specific penalty will be considered commensurate with each AI system provider’s market position in each case. Therefore, this regulation still reserves a certain tolerance for small investors or startups.

**IMPACT OF THE AI ACT**

In 2018, the EU’s General Data Protection Regulation (GDPR) led the region in global data protection regimes. The introduction of the AI Act further cements Europe’s position as a worldwide hub for AI, ensuring that AI in Europe respects the values and rules of all Member States. The AI Act brings transparency, trust, and accountability to AI, creating a framework to mitigate risks to the safety, health, fundamental rights, and democratic values of the EU. The AI Act also addresses ethical questions and challenges in various sectors, from healthcare and education to finance and energy. The provisions of the AI Act strike a balance between promoting the development of AI and minimizing or preventing specific harms associated with the use of the technology. It can be seen that the AI Act lays the foundation for the EU’s digital economy to remain competitive because it meets two basic requirements, including (i) Providing clear legal rules for actors but also being flexible enough to stand the test of time; and (ii) Maintaining a proportional and risk-based level to limit any unnecessary impact on AI innovation.

On a legislative level, the AI Act has opened the door to inspiring countries worldwide to take AI regulation seriously. Since it was first introduced in 2021, several countries have begun to consider either a coercive approach (similar to the one adopted in the EU) or a self-regulatory approach to AI. For example, the Brazilian Congress is considering drafting a law to regulate AI in Latin America, while Chile has also introduced AI legislation (Unesco, 2023). Canada is looking at how to regulate AI as part of its C-27 package (The Canadian Bar Association, 2023). Discussions about AI governance are also taking place in the US (United Nations University, 2023). China's interim measures on innovative AI management have been effective since August 15, 2023 (Liu & Edmondson, 2023). The UK also released a policy paper called A Pro-Innovation Approach to AI Regulation, which attempts to balance regulation and innovation around AI (UK Government
Department for Science, Innovation and Technology, 2023). With all this activity, the EU AI Act will impact other jurisdictions' approach to AI policy, potentially serving as a de facto standard for AI governance without other separate AI regulations (Courtney Lang, 2023).

This means that the world is at a critical juncture regarding AI regulation, as AI's development, use, and impact are borderless. In this context, through the AI Act, the EU is the first jurisdiction in the world to adopt a comprehensive law regulating AI systems explicitly. This leads to the expectation that other legislators will follow Europe's path and start drafting laws to regulate AI.

On the opportunity side, the AI Act will establish a framework to ensure consumer trust in AI. In addition, the AI Act will promote investment and innovation in AI. Investors will consider the legality of AI models that have been deployed and are being implemented and assess the associated risks, thereby implementing data protection and cybersecurity frameworks to provide a similar foundation for compliance with the AI Act. This action is necessary for businesses with AI systems operating in the EU and all AI businesses worldwide, as national regulators have begun to show interest in issuing AI management regulations based on the AI Act's trends. Proactive adaptation is necessary, as the legal landscape for AI is constantly evolving. Early preparation is the best way to ensure compliance and regulatory compliance.

The AI Act also creates a high standard of compliance that requires continuous risk assessment and mitigation as a standard part of business operations. This is not an easy task, but it is not a sudden or impossible requirement. AI companies need to change the algorithm design process to deliver consistent value on demand while demonstrating how the AI system meets the requirements of the AI Act.

Thus, to begin the process of full compliance with the AI Act, investors need to take several steps, from assessing the risks associated with their AI systems, raising awareness, designing ethical systems, assigning responsibilities, and staying up to date on the draft amendment and adoption process of the AI Act. By taking proactive steps now, investors can avoid potentially significant sanctions against their organizations when the AI Act comes into effect. While this preparation and implementation can be time-consuming and costly, compliance with the AI Act will help investors achieve competitive differentiation in the market.

LEGAL FRAMEWORK FOR AI MANAGEMENT IN VIETNAM

DEVELOPMENT CONTEXT OF ARTIFICIAL INTELLIGENCE IN VIETNAM

AI has the potential to develop in Vietnam. According to the assessment of the Government's artificial intelligence readiness index conducted by Oxford Insights (UK) and the Canadian International Development Research Center, in 2021, Vietnam ranked 62nd globally. According to data from the Vietnam - Australia Artificial Intelligence Network (Vietnam - Australia AI), AI can be applied in state management, improving investment policies, smart city construction projects, national digital transformation, and e-government (Soc et al., Department of Science and Technology, 2022).

In the socio-economic field, AI has been applied in several industries such as e-commerce (29%), transportation and logistics (18%), education (13%), real estate (12%), finance (11%), agriculture (5%) and other fields (12%). In the banking and finance industry, AI is applied in automatic response software (chatbot), fraud and money laundering detection tools, and credit decision support. AI in the commercial sector can recognize product codes and apply biometrics in electronic payments. AI can serve non-stop toll stations, traffic monitoring and control centers, intelligent logistics systems, or technology taxis in the transportation and logistics industry. Intelligent robots integrated with AI are also deployed in hospitals to support medical staff. However, the level of AI application in each field is still different (Soc et al., Department of Science and Technology, 2022).

CURRENT STATUS OF THE LEGAL FRAMEWORK REGULATING AI IN VIETNAM

The Government of the Socialist Republic of Vietnam has issued several regulations to develop artificial intelligence, notably, Directive No. 16/CT-TTg dated May 4, 2017, of the Prime Minister on enhancing capacity to access the fourth industrial revolution. Directive No. 16/CT-TTg identifies AI as a priority area for investment and development. Subsequently, the Politburo issued Resolution 23-NQ/TW dated March 22, 2018, on the orientation for developing the "National Industrial Policy to 2030, with a vision to 2045".
On October 2, 2019, the Prime Minister issued Decision No. 1269/QD-TTg dated October 2, 2019, on the establishment of the National Innovation Center to support and develop the startup and innovation ecosystem of Vietnam, contributing to the innovation of the growth model based on science and technology. On October 18, 2019, the Ministry of Health issued Decision No. 4888/QD-BYT, approving the Project on the application and development of intelligent medical information technology for 2019-2025.

On April 17, 2020, in Vietnam, the Government passed Resolution No. 50/NQ-CP dated April 17, 2020, promulgating the Government's Action Program to implement Resolution No. 52-NQ/TW dated September 27, 2019, of the Politburo on several policies and strategies to participate in the Fourth Industrial Revolution proactively.

On January 26, 2021, the Prime Minister signed Decision No. 127/QD-TTg promulgating the National Strategy on AI Research, Development and Application to 2030. The Strategy also provides orientations for the legal system, especially IP law, to build a system of legal documents that meet two main requirements: (i) Create an open legal corridor, meeting the requirements of promoting AI research, development, and application in life; (ii) Develop and apply AI with people and businesses at the center, avoid technology abuse and infringement of the rights and legitimate interests of organizations and individuals. Contribute to promoting a creative society and effective Government, protecting national security, maintaining social order and safety, and promoting sustainable economic growth.

From 2020 onwards, Vietnam has amended and promulgated a series of legal documents such as the 2022 Cinema Law, the 2022 Intellectual Property Law (amended), the 2023 Telecommunications Law, the 2023 Law on Electronic Transactions, Decree 85/2021/ND-CP amending and supplementing Decree 52/2013/ND-CP on e-commerce, Decree 13/2023/ND-CP on personal data protection. It is expected to continue amending and promulgating new documents such as the 2024 Advertising Law (amended), the Decree replacing Decree 72/2013/ND-CP on management, provision, and use of Internet services and online information, the Law on Personal Data Protection, to address changes in legal relations due to the emergence of digital technology.

Clause 2, Article 22 of Decree 13/2023/ND-CP dated April 17, 2023, on personal data protection, stipulates: "The establishment of software systems, technical measures or the organization of activities to collect, transfer, buy and sell personal data without the consent of the data subject is a violation of the law." This provision can be used to prevent AI from stealing personal data and violating privacy because AI can be considered a software and technical measure from specific perspectives. However, this is difficult to implement in practice because it is not designed for AI, especially for AI systems with many unique characteristics, capable of thinking and acting without direct human control and manipulation. On June 22, 2023, the National Assembly issued the Law on Electronic Transactions No. 20/2023/QH15.

However, the legal system still needs to approach AI. In other words, no specific regulations determine AI's legal status when participating in social relations regulated by law. Civil law in Vietnam stipulates that the subject must be an individual or an organization (2015 Civil Code), but has not yet recognized the subject as a machine or computer program, so it would be impossible to determine the legal status of AI as a subject in the law. Article 13 of the Law on Intellectual Property stipulates that copyright subjects include: “Vietnamese organizations and individuals; foreign organizations and individuals whose works are first published in Vietnam but have not been published in any country or are simultaneously published in Vietnam within thirty days from the date the work is first published in another country; foreign organizations and individuals whose works are protected in Vietnam under international conventions on copyright to which Vietnam is a member." Thus, current law stipulates that only organizations, individuals, or humans are subjects that can hold copyright; objects such as computers, robots, or AI cannot be subjects that can hold copyright.

The issue of intellectual property rights for works and inventions created by AI is creating legal challenges because, according to the legal regulations of our country, intellectual property rights are only imposed on intellectual property created by humans. This poses many potential legal risks when disputes arise, especially disputes over intellectual property rights for products made by AI that are infringed upon or, conversely, disputes related to intellectual property rights that AI infringes upon.
The current Vietnamese system still regulates traditional social relations related to individuals, legal entities, and organizations without legal status. The legal space for legal relations involving technology or AI still needs to be improved. Regulations on AI in Vietnam are still in their infancy.

**RECOMMENDATIONS FOR IMPROVING VIETNAM'S LEGAL FRAMEWORK RELATED TO AI**

Firstly, it is necessary to study and clearly define AI's legal status and nature towards building a legal framework to regulate legal relationships related to AI, such as property relations, ownership rights, intellectual property, labor relations, compensation for damages, etc.

Secondly, regarding intellectual property rights, building a solid legal corridor for the recognition and protection of AI is necessary. In addition, it is essential to recognize inventions and works created by AI and amend regulations on identifying authors of works and inventions to create a premise for granting copyrights and patents.

Thirdly, regarding privacy and personal data, it is necessary to learn from European legal experience to make specific regulations on personal data, data processing, protection, and personal rights related to data in cyberspace.

Fourth, regarding the liability for damages related to AI, in addition to applying current regulations to address the issue of compensation, legislators need to prepare rules on determining the subject of liability for compensation. Specifically, regulations on the liability for compensation of manufacturers, AI owners, legal or illegal possessors of AI systems, and AI-bearing entities in non-correlated and joint-related relationships.

Fifth, it is necessary to classify AI technologies reasonably to set appropriate regulations for each subject when owning, exploiting, and using AI technologies. Thus, regulations on issues related to AI technology will become stricter and more precise. Sixth, Vietnam needs to conduct surveys and carefully consider them before issuing regulations about AI. Mainly associated with the Labor Code, it is necessary to carefully consider the factors of AI that affect the rights of workers in particular and the labor market in general, thereby issuing appropriate regulations. This conformity must not only be consistent with the economic and social context of Vietnam but also be compatible and consistent with the global international legal system. In addition, Vietnam's policies and laws must promote infrastructure development commensurate with the evolution of technology. There must be mechanisms and policies to facilitate domestic and foreign enterprises to invest in AI-related fields. This will contribute to economic growth and social development, and the primary beneficiaries will be workers as the demand for jobs will also increase. In addition, it is also necessary to pay attention to other issues such as privacy, security, and data safety in the digital space to ensure the rights of technology users in general and workers affected by AI in particular.

**REFERENCES**


Eu Ai Act and Its Relationship with Vietnamese Law in Creating a Legal Policy for Ai Regulation


